

Claims

What is claimed is:

5 1 ~~A method of forming instructions for execution in a processing~~
system, said method comprising:

- 10 a. providing an opcode portion determining at least one
operation to be performed by the processor; and
- b. providing a parameter portion comprising at least one
parameter representing a respective data value, said
parameter portion including an indicator representing at
least one of the following definitive characteristics of
said at least one parameter:
- 15 i. the number of bits in a data value represented by
said parameter;
- ii. the number of bytes in said parameter;
- iii. whether said parameter represents a compressed data
value.

20 2 A method as in claim 1 where the parameter portion comprises
at least one parameter, of one of the following types:

- (1) a compressible, unsigned parameter of
predetermined length;
- (2) a compressible, signed parameter of
predetermined length.
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3 ~~A method as in claim 1 where the opcode defines the number of~~
parameters in the parameter portion.

5 4 A method as in claim 1 where the opcode defines the
uncompressed length of the at least one parameter.

5 A method as in claim 1 where the opcode defines whether said
at least one parameter includes a sign.

10 6 A method as in claim 1 where the at least one parameter
represents a memory address.

10 7 A method as in claim 1 where the parameter portion comprises a
plurality of parameters and where the opcode portion
determines the order of arrangement of said parameters.

20 8 A method as in claim 1 where the at least one parameter
includes a bit field indicating a parameter-related
characteristic.

9 A method as in claim 8 where the bit field represents at least
one of:

- 25 a. the number of bits in a data value represented by the at
least one parameter;

- b. the number of bytes in the at least one parameter;
- c. whether the at least one parameter represents a compressed data value.

5 10 A method of forming instructions for execution in a processing system, said method comprising:

- a. providing an opcode portion determining at least one operation to be performed by the processor; and
- b. providing a compressible parameter portion comprising at least one parameter representing a respective data value, said parameter portion including an expansion indicator representing the state of compression of said at least one parameter.

11 A method as in claim 10 where the at least one parameter comprises a single byte in which the expansion indicator is included.

12 A method as in claim 10 where the at least one parameter comprises a plurality of bytes, each of said bytes including an expansion indicator.

13 A method as in claim 10 where the at least one parameter comprises a plurality of bytes, at least one of said bytes including an expansion indicator.

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